

## Application of

**Applicants** 

: James E. Toney

Serial No.

: 10/658,122

Filed

: September 9, 2003

Title

: WAVELENGTH SEPARATION DEVICES INCORPORATING

MULTI-BARRIER PHOTONIC HETEROSTRUCTURES

Docket

: BAT 0089 PA/40078.245

Art Unit

: N/A

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-

1450 on December 5, 2003.

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97, AND 1.98

Applicant submits herewith patents, publications, and other information of which he is aware, which he believes may be material, as defined in 37 CFR \$1.56(b), to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR \$1.56(a). While the information referred to in this Information Disclosure Statement may be material pursuant to 37 CFR \$1.56(b), the filing of this Information Disclosure Statement is not intended to, pursuant to 37 CFR \$1.97(h), constitute an admission that any patent, publication, or other information referred to is, or is considered to be, material to the patentability of this invention. Further, pursuant to 37 CFR \$1.97(g), the filing of this Statement should not be construed as a statement that a search has been made or that no other material information exists.

This Information Disclosure Statement is being filed within the period set forth in 37 CFR \$1.97(b) because it is filed within three months of the filing date of a national application or within three months of the date of entry of the national stage as set forth in 37 CFR \$1.491 in an international application.

The Office has waived the requirement pursuant to 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC § 371 after June 30, 2003. Therefore, no copies of each cited U.S. patent and each cited U.S. patent application publication are enclosed, but the cited U.S. patents and the cited U.S. patent application publications are listed on PTO/SB/08A.

Respectfully submitted, DINSMORE & SHOHL LLP

Bv

James E. Beyer

Registration No. 39,564

One Dayton Centre One South Main Street, Suite 500 Dayton, Ohio 45402-2023 Telephone: (937) 223-2050

Facsimile: (937) 223-0724

JEB/kec Encls.

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE ler the Paperwork Eduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

Examiner

Signature

Complete if Known					
Application Number	10/658,122				
Filing Date	September 9, 2003				
First Named Inventor	James E. Toney				
Art Unit					
Examiner Name					
Attornov Dooket Number	DAT 0000 DAMOOZO 045				

Examiner	Cite	Document Number	Publication Date	T DOCUMENTS  Name of Patentee or	Pages, Columns, Lines, Where
Initials*	* No.¹ MM-DD-YYYY Number-Kind Code² (# known)		Applicant of Cited Document Relevant Passages Figures Ap		
		<sup>US-</sup> 5,335,240	08/02/1994	Ho et al.	
		<sup>US-</sup> 5,406,573	04/11/1995	Ozbay et al.	
		<sup>US-</sup> 5,440,421	08/08/1995	Fan et al.	
		<sup>US-</sup> 5,600,483	02/04/1997	Fan et al.	
		<sup>US-</sup> 5,740,287	04/14/1998	Scalora et al.	
		<sup>US-</sup> 5,784,400	07/21/1998	Joannopoulos et al.	
		<sup>US-</sup> 5,973,823	10/26/1999	Koops et al.	
		<sup>US-</sup> 5,998,298	12/07/1999	Fleming et al.	
		<sup>US-</sup> 6,042,998	03/28/2000	Brueck et al.	
		<sup>US-</sup> 6,058,127	05/02/2000	Joannopoulos et al.	
		<sup>US-</sup> 6,075,640	06/13/2000	Nelson	
		<sup>US-</sup> 6,101,300	08/08/2000	Fan et al.	
		<sup>US-</sup> 6,134,043	10/17/2000	Johnson et al.	
		<sup>US-</sup> 2001/0019565 A1	09/06/2001	lwasaki et al.	
		<sup>US-</sup> 2002/0009277 A1	01/24/2002	Noda et al.	
		<sup>US-</sup> 6,388,795	05/14/2002	Fleming et al.	
		<sup>US-</sup> 6,392,787	05/21/2002	Cirelli et al.	
		<sup>US-</sup> 6,396,617	05/28/2002	Scalora	
-		<sup>US-</sup> 6,448,997	09/10/2002	Koide	

FOREIGN PATENT DOCUMENTS											
	Cite No.1						Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> ( <i>if known</i> )	MM-DD-YYYY		Or Relevant Figures Appear	ť					
		WO 02/44672 A2	06/06/2002	Frick							
		7				<u> </u>					
						ļ					
						Ļ					
		1		1							

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Date

Considered

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for the 1940 Co

Sheet

of 1995, no persons are required to res

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known					
Application Number	10/658,122	_			
Filing Date	September 9, 2003				
First Named Inventor	James E. Toney				
Art Unit		_			
Examiner Name					
Attorney Docket Number	BAT 0089 PA/40078.245	フ			

U. S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number Publication I MM-DD-YY Number-Kind Code <sup>2 (# known)</sup>		Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
•		US- 2003/0031438 A1	02/13/2003	Kambe et al.			
		<sup>US-</sup> 2003/0043870 A1	03/06/2003	Shchukin et al.			
		<sup>US-</sup> 6,560,006	05/06/2003	Sigalas et al.			
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
-		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
-		US-					

		FOREIC	GN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T°
-						<u> </u>
						<u> </u>
	<del> </del>					<del> </del>
	<b></b>					<del>                                     </del>
						$\vdash$

Examiner	Date	
Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND** TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	te for form 1440 70			e required to respond to a concentr	of information unless it contains a valid OMB control number.  C mpl te if Kn wn
Gubsinut	te for form 1444 Park			Applicati n Number	10/658,122
INFO	DRMATION	I DIS	CLOSURE	Filing Date	September 9, 2003
STA	STATEMENT BY APPLICANT			First Named Inventor	James E. Toney
	(Use as many she			Art Unit	
	(Ose as many sne	ets as n	ecessary)	Examiner Name	
Sheet	3	of	3	Attorney Docket Number	BAT 0089 PA/40078.245

Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue				
		number(s), publisher, city and/or country where published.	T <sup>2</sup>			
		SATO et al.; 3-D Photonic-Crystal Heterostructures: Fabrication and In-Line Resonator; IEEE Photonics Technology Letters; June 2003; pgs. 816 - 818; Vol. 15, No. 6.				
	-	JOHN et al.; Photonic Band Gap Materials: A Semiconductor for Light; pgs. 1- 23.	·			
		FAN et al.; Channel Drop Filters in Photonic Crystals; Optics Express; July 1998; pgs. 4 - 11; Vol. 3, No. 1.				

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.